



## National Marine Protected Areas Center

### Information Exchange for Marine Educators

#### Archive of Workshops and Professional Development

#### **American Museum of Natural History Online Diversity of Fishes Seminar**

In partnership with the NSTA Institute, The American Museum of Natural History offers Seminars on Science, its award-winning online professional development program. A six-week course in ichthyology will be available to K-12 educators, February 16-March 28, 2004. Participants receive learning resources for use in the classroom.

<http://learn.amnh.org/welcome.php?w=NSTAIW041> .

#### **American Museum of Natural History Winter & Summer 2005 Courses**

The American Museum of Natural History offers accredited courses (through the City University of New York) in a variety of natural science topics. Included on the 2005 schedule are The Diversity of Fishes and Sharks and Rays.

<http://learn.amnh.org/courses/courses.php> .

#### **Applied Environmental Education Program Evaluation Online Course**

A 9-week online course, "Applied Environmental Education Program Evaluation," is offered periodically through the University of Wisconsin-Stevens Point. The course is designed to assist environmental educators and natural resource professionals in evaluating their education programs. Participants have the opportunity to apply skills in designing evaluation tools such as surveys, observation forms, and interview and focus group guides.

<http://www.uwsp.edu/natres/rwilke/eetap/> .

#### **Aquatic Ecosystems and Research Methods Teacher Workshop**

The Bruce Museum of Arts and Science in Greenwich, Connecticut, in collaboration with Audubon Greenwich, is hosting a summer teacher's workshop on Aquatic Ecosystems, July 12 - July 16, 2004. The workshop will provide hands-on research experience of Long Island Sound and its watershed tributaries, including marine and fresh water environmental science. Participants will receive classroom and field activities appropriate for elementary and middle school classes.

[http://www.brucemuseum.org/education/teachers\\_summer.php](http://www.brucemuseum.org/education/teachers_summer.php) .

#### **Aquatic Nuisance Species Teacher Workshop - Mississippi.**

The Scott Aquarium of The University of Southern Mississippi will offer an Aquatic Nuisance Species workshop November 17-19, 2004, Biloxi, Mississippi. The workshop includes lectures by guest scientists, numerous educational activities, and a field trip to Horn Island and the Grand Bay National Estuarine Research Reserve. Participation is limited to 18 teachers; accommodations and meals will be provided. This workshop has been approved for 1.4 CEUs.

[shelia.brown@usm.edu](mailto:shelia.brown@usm.edu) .

### **Armada Project - Research & Mentoring Experiences for Teachers**

The ARMADA Project provides K-12 teachers opportunities to actively participate in ocean, polar, environmental science research and peer mentoring. Master Teachers develop ways to bring their research experiences, including scientific data, methodologies, and technology, into the classroom. ARMADA teachers mentor new teachers and present at NSTA Conventions.

<http://www.armadaproject.org>

### **Beach Management, Tourism and the Coastal Environment Workshop**

Beach Management, Tourism and the Coastal Environment Workshop: *A Conference of America's Beaches*, planned for March 2-4, 2005 in Miami, Florida will focus on overlapping contemporary social and scientific issues. Topics include beach management and tourism, beach management in the face of coastal disasters, and beach management and the environment (including education).

[defraene@fiu.edu](mailto:defraene@fiu.edu)

### **Best Education Practices for Water Outreach Professionals**

The University of Wisconsin Environmental Resources Center hosts *Defining Best Education Practices, Refining New Resources and Recommending Future Actions Symposium*, June 2-4, 2004, Madison, Wisconsin. Best education practices and topic-specific water outreach resources will provide a resource for natural resource and water outreach professionals.

<http://www.uwex.edu/erc/waterbeeps>

### **Biocomplexity in Shallow-Water Hydrothermal Systems Student Workshop**

National Science Foundation and the University of South Florida sponsored a student workshop, May 25-31, 2003, St. Petersburg, Florida to explore *Biocomplexity in Shallow-Water Hydrothermal Systems*.

<http://www.biocomplexity.usf.edu/index.htm>

### **Boeing Teacher Institute**

The Aquarium of the Pacific's 2004 Boeing Teacher Institute, August 23-27, 2004, provided K-8 teacher participants an intensive introduction to the aquarium, marine biology and Southern California's diverse marine life, habitats and ecosystems. Guided tours, standards-based activities and field trips provided teachers with an up-close look at California marine life. Participants also receive a complete aquarium, including filtration and a guidebook on how to incorporate aquariums into their curriculum.

John McCord at 562/951-1624 or [jmccord@lbaop.org](mailto:jmccord@lbaop.org).

### **California Professional Development Workshops**

CREEC-LA Network, a project of the California Department of Education and TreePeople, hosts an extensive search engine of California educational resources, including the following professional development opportunities: *9th annual WEFTeach* for Los Angeles-area high school teachers about water quality, Oct. 14, and *Waves, wetlands and watersheds educator workshops*, Orange County, November 5, 2003.

[www.creec.org](http://www.creec.org), [www.coastforyou.org](http://www.coastforyou.org), and [www.wef.org/wefteach](http://www.wef.org/wefteach)

### **Camp SEA Lab Teacher Workshop**

Camp SEA Lab is a marine science camp adventure for youth ages 8-13. Science, Education, and Adventure are the focus as SEA Campers explore the marine world from the top of the watershed to the bottom of the deep sea. They hosted a free teacher

workshop *From Sandy Shores to Salty Seas* on February 21, 2004.  
<http://www.campsealab.org/Programs/Teachers/> .

### **Certified Interpretive Guide Training**

The National Association for Interpretation (NAI) offers a professional certification program to recognize individuals who exhibit knowledge and skills necessary to assure quality interpretive services to all audiences. The Certified Interpretive Guide (CIG) program is one level in that program. The State Arboretum of Virginia at Blandy Experimental Farm, Boyce, Virginia, will host a CIG workshop March 2 - 5, 2005.  
<http://interpnet.com/interpnet/miscpages/programs/Workshops/CIG/ArboretumMarch2005.htm>

### **Certified Marine Investigator Training Seminar**

For those place-based educators whose additional duties cover a lot of water, check out this seminar. The International Association of Marine Investigators offers its annual Certified Marine Investigator Training Seminar, February 22-25, West Palm Beach, Florida.  
<http://www.iamimarine.org/2004%20Seminar.htm> .

### **Charlotte NC SE PORT**

The Southeast COSEE SouthEast Portal to Ocean Research for Teachers (SE PORT) has an Ocean Awareness Day scheduled for March 27, 2004 at the Discovery Place, Charlotte North Carolina, for North and South Carolina educators.  
Contact Mary Bures at [maryb@discoveryplace.org](mailto:maryb@discoveryplace.org) .

### **Coastal Ecosystem Education Program**

A free, one-week Coastal Ecosystem Education Program workshop offers professional training about rocky intertidal and sandy beach monitoring projects. The complimentary curriculum offers background information and activities about the ecology and oceanography of the Gulf of the Farallones National Marine Sanctuary.  
<http://www.farallones.org> .

### **Coastal Explorations Workshop – North Carolina**

The North Carolina National Estuarine Research Reserve and Coastal Reserve programs held a Coastal Explorations Workshop, September 10-11, 2004, Atlantic Beach, North Carolina. This workshop targeted activities for use in both the classroom and in the field. These activities are designed to increase awareness and understanding of the importance of estuaries. Both activity guides include a variety of activities and levels of information.  
<http://www.ncnerr.org/education/workshops/index.html> .

### **Colonial Coast Birding & Nature Festival - Georgia**

The Colonial Coast Birding & Nature Festival celebrates Southeast Georgia as a birder's paradise, offering a wide variety of habitats and wildlife. Shorelines, salt marshes, old rice fields, woodlands, tidal rivers, freshwater wetlands and more all host their own fascinating bird communities. The festival is not just for birders, offering field trips and seminars that will appeal to all types of nature lovers, including different vendors, conservation groups, kids' activities, arts and crafts, even a live raptor show.  
[www.coastalgeorgiabirding.org](http://www.coastalgeorgiabirding.org) .

### **Communicating Complex Biological Stories in National Parks**

This workshop, March 30-31, 2004, Atlanta, Georgia (immediately preceding NSTA's Conference), focuses on communicating and designing educational programs for National Park Service biological resources. Participants will complete a pre-workshop assignment, a post-workshop product, and contribute to a publication on techniques for bringing the biological sciences to both the general public and educators.

[http://www.nature.nps.gov/LearningCenters/new/biowrkshp\\_flyer\\_mar03.pdf](http://www.nature.nps.gov/LearningCenters/new/biowrkshp_flyer_mar03.pdf) .

### **Communicating for Conservation Workshops**

The Ocean Project conducts day-long conservation communications workshops to bring their communications strategy directly to key staff at Partner Institutions throughout the country, including aquariums, zoos, and museums. The interactive workshops increase the capacity of staff at these institutions to effectively educate their visitors about conservation through improved exhibits, outreach, and other educational programs.

[http://www.theoceanproject.org/what\\_we\\_do/communication.html](http://www.theoceanproject.org/what_we_do/communication.html)

### **Community Biodiversity Education Partnership Program**

The U.S. Fish and Wildlife Service's National Conservation Training Center will host forty formal and nonformal educators for the *Community Biodiversity Education Partnership Program* and present a training session, November 12-14, 2003 Shepherdstown, West Virginia. The program will bring educators together to explore creative ways to enhance biodiversity education locally and globally.

[www.worldwildlife.org/windows/CBEPP.html](http://www.worldwildlife.org/windows/CBEPP.html)

### **Community Culture and Sense of Place Training**

The US EPA's Coastal Management Branch provided *Community Culture and Sense of Place Training*, March 10-11, 2003, Seattle, Washington. For more information about the Seattle workshop, contact [trainor.theresa@epa.gov](mailto:trainor.theresa@epa.gov).

<http://www.trainex.org>

### **Cool Waters: Water Workshop for Georgia Educators**

This free water workshop for Georgia educators, June 14-16, 2004, was geared toward middle school teachers. Each day of the workshop included field trips and hands on classroom activities, food, field trips, and many free resources.

<http://eeingeorgia.org/event.asp?eventID=17802> .

### **Critter Cam Virtual Teacher Workshop**

The National Geographic Society and the National Science Foundation offer a 2-week virtual teacher workshop, highlighting the use of National Geographic's research tool, Crittercam, to explore the mysteries of ocean life. Deployed on the backs of whales, sharks, seals, sea turtles and more, Crittercam provides an unprecedented look at the marine world through the animals' perspective. Teacher resources include access to research findings, lesson plans, magazine articles, video clips, and Internet links.

<http://www.coexploration.org/crittercam/> .

### **DataStreme Water In The Earth System Online**

This free Water in the Earth System course is sponsored by the American Meteorological Society and the National Science Foundation. This Internet-based distance-learning course is directed towards middle-school teachers. The course incorporates inquiry-based instructional strategies and a holistic concept of Earth from oceanic, atmospheric and terrestrial water and problem-focused perspectives. It

investigates the mass and energy flows associated with the global water cycle, and with related issues.

<http://64.55.87.13/amsedu/WES/index.html> .

### **Dauphin Island Summer Teacher Workshops**

Dauphin Island Sea Lab offers an array of summer teacher workshops. Each features hands-on learning experiences and classroom materials.

- Exploring the Florida Keys, May 30 – June 5, 2004
- Beaches, Birds & Barrier Islands, July 11-14, 2004
- Coastal Connections – Linking Watersheds to the Gulf of Mexico, July 18–22, 2004
- Grasses, Groupers & Gastropods, July 25 - 29, 2004
- Marine Application of Science and Technology, June 6-11, June 13-18, and June 20-25, 2004

<http://dhp.disl.org/teachertraining.htm> .

### **Designing for e-Learning**

This 15 week course explores the essential components of designing and developing an e-Learning course. Participants will explore principles, theories, and paradigms of distance education; review technology issues; and demonstrate design, development and assessment methodologies. You will have the opportunity to design and develop your own course by the end of the learning experience. Credit is available from University of Alaska Anchorage. .

<http://www.creative-conservation.com/designinffordistance.htm>

### **Designing for Distance Workshop Series**

This six-part Designing for Distance workshop mentors you through the design and development of a distance learning course, and then offers methods to teach your creation to your audience. The workshop is taught entirely using distance methodologies. The workshop begins January 26, 2004.

<http://www.creative-conservation.com/Flyer2/Flyer2.htm>

### **Developing Teacher Training Course - California**

This face-to-face training course, scheduled for February 28 - March 4, 2005, in San Francisco, California, presents the essential components of work with schools and school systems, designing, conducting and evaluating teacher training. The course culminates with participants applying their skills at actual teacher workshop. Upon return to their sites, each participant is also expected to plan and conduct a workshop for teachers within a year.

[georgia\\_jeppesen@fws.gov](mailto:georgia_jeppesen@fws.gov)

<https://otis.fws.gov> (OUT8161)

### **Discovering the Mysteries of Whales Lecture – California**

The Center for Ocean Sciences Education Excellence-West (COSEE-West) offered a lecture and workshop about whales, October 13, 2004, Los Angeles, California. The research focuses on the evolution, natural history, anatomy and conservation of whales, dolphins and porpoises. K-12 teachers pre-registered for the post-lecture session received documentation for professional development hours. Additional content information and classroom materials were provided in the teachers' session.

Peggy Hamner at 310/206-8247 or [phamner@ucla.edu](mailto:phamner@ucla.edu) .

### **Down Under, Out Yonder Workshop Update**

The Flower Garden Banks National Marine Sanctuary *Down Under, Out Yonder* education workshop application workshop dates are July 10-14, 2004.

<http://www.gulfmex.org/duoy.htm> .

### **Education Program Evaluation**

The U.S. Fish and Wildlife Service's National Conservation Training Center will host *The Education Program Evaluation* course (OUT8102), January 27-30, 2004, Shepherdstown, West Virginia. The course provides an overview of conducting evaluations for education and outreach programs and a chance to practice skills in designing and using evaluation tools for surveys, interviews, and observations.

<http://training.fws.gov/courses.html>

### **Education Programs For Youth; School's Out!**

Education Programs For Youth; School's Out! (OUT8162) is a 3-day course offered by the U.S. Fish and Wildlife Service at the National Conservation Training Center in Shepherdstown, West Virginia. The course presents participants with the elements for designing outdoor programs for youth (e.g. after school, day and residential camps, and weekend programs) in a non-formal setting, such as wildlife refuges and parks.

<http://training.fws.gov/courses.html>

### **EETAP Diversity Workshops for Environmental Educators**

The Environmental Education and Training Partnership (EETAP) offers professional development diversity workshops for environmental educators. The workshops explore multicultural issues as they occur in the real world of environmental education through case study discussion. Participants explore the intersection of EE and cultural diversity and identify steps that can be taken to make one's own organization and program more inclusive and culturally diverse.

[http://www.eetap.org/html/new\\_products.php#PRODUCT\\_5](http://www.eetap.org/html/new_products.php#PRODUCT_5) .

### **Enduring Resources for Earth Science Education**

The Enduring Resources for Earth Science Education (ERESE) Teachers Workshop will be held at the Scripps Institution of Oceanography, July 11-24, 2004. The two-week summer workshop is open to middle and high school teachers who teach Earth science concepts. Participants will learn how to create Enduring Resources.

<http://earthref.org/events/ERESE/2004/> .

### **Environmental Concern's Wetlands Training Schedule for 2004**

Environmental Concern, Inc. has posted their schedule for wetlands training for the upcoming year. In addition to advanced delineation techniques, topics include Fern and Fern Allies ID, Grasses, Sedges and Rushes, Wetland Botany for Non- Botanists, Wetland Mitigation Design. There are also plans to offer their WOW! and POW! workshops in Puerto Rico.

[www.wetland.org](http://www.wetland.org) .

### **Environmental Education in the Albemarle-Pamlico Sounds Region Workshop**

The North Carolina Department of Environment and Natural Resources offers the 2004 Environmental Education Institute, *Environmental Education in the Albemarle-Pamlico Sounds Region*. This is a free professional development opportunity for K-12 teachers to integrate Environmental Education into North Carolina's Standard Course of Study



Curriculum focusing on inquiry-based field investigations and hands-on activities.  
Curriculum materials are provided.

<http://www.ee.enr.state.nc.us/Institutes/APNEP%20Institute%20Info%202004.htm> .

### **Environmental Education Methods**

Environmental Education Methods (OUT8160) is a 4-day course offered by the U.S. Fish and Wildlife Service at the National Conservation Training Center in Shepherdstown, West Virginia, September 13-16, 2004. It helps participants incorporate evaluation strategies into program planning and implementation, and learn about working with students, teachers, youth groups, and their leaders, both on and off public lands. This course is only offered alternate years.

<http://training.fws.gov/courses.html>,  
[georgia\\_jepesen@fws.gov](mailto:georgia_jepesen@fws.gov), 304-876-7366.

### **Environmental Educators Training Program**

The Environmental Educators Training Program, cooperatively presented by the Headlands Institute, the National Park Service and UC Berkeley Extension, is a residential training program for formal and nonformal educators to enhance knowledge of environmental sciences, concerns, and skills for teaching integrated, hands-on curriculum. This five-day residential course was offered July 26-30 or August 9-13, 2004, in Sausalito, California.

<http://www.yni.org/hi/educator.html> .

### **Estuaries to the Abyss Expedition Professional Development Institute – South Carolina**

A Professional Development Institute for the Estuaries to the Abyss Expedition, from August 20-September 1, 2004, focused on the expedition, which used a variety of tools to map and describe the unique bottom features, faunas, and ecology of the Florida-Hatteras Slope, the Charleston Bump, and Blake Escarpment off the Southeastern coast of the U.S. Scientists explored faunal change and human impact along a gradient that includes increasing depth and distance from land.

<http://oceanexplorer.noaa.gov/explorations/04etta/welcome.html> .

### **E-Teaching: Preparing Successful Online Instructors**

*E-Teaching: Preparing successful online instructors* is a five-week distance delivered course designed to prepare instructors to teach distance education. It explores the differences of traditional and virtual classrooms and many of the options in between, as reported by experts in the field of e-learning. It also shows applicable techniques for effective e-teaching and common mistakes to avoid.

<http://www.creative-conservation.com/trainingopps.htm>

### **Expanding the Ark: The Emerging Science and Practice of Invertebrate Conservation**

Of particular note to New York area students due to the special student registration rate: The American Museum of Natural History's Center for Biodiversity and Conservation, in collaboration with Conservation International, the National Parks Service, NatureServe, the U.S. Fish and Wildlife Service, and the Xerces Society, convenes a two-day symposium, March 24-25, 2004, New York City, New York, to examine the status of invertebrate biodiversity.

<http://research.amnh.org/biodiversity/symposia/expandingthearc/> .

### **Flower Garden Banks National Marine Sanctuary Education Workshop**

K-12 educators are invited to participate in a two-part workshop, July 10-14, 2004, that concludes with a field experience in SCUBA diving in the Flower Garden Banks National Marine Sanctuary (FGBNMS). The land-based portion of the workshop includes lectures on basic coral biology, the National Marine Sanctuary Program, the FGBNMS and its current issues, and an introduction to reef fish identification.

<http://flowergarden.noaa.gov>

### **Fundamentals of Environmental Education**

The 10-week long, on-line course provides educators with the knowledge and skills necessary to incorporate environmental education into their instruction. Participants discuss the history, definition, and goals of environmental education, develop an understanding of the professional roles and instructional methods of environmental educators, and interact with other educators from across the country.

[http://www.eetap.org/html/online\\_ee\\_course.php](http://www.eetap.org/html/online_ee_course.php)

<http://www.uwsp.edu/natres/rwilke/eetap/> .

### **From Watersheds to Oyster Beds**

SouthEast Center for Ocean Sciences Education Excellence (SE-COSEE) and NOAA's SouthEast Phytoplankton Monitoring Network will host *From Watersheds to Oyster Beds*, a teachers' workshop. The workshop is open to 20 middle and high school teachers, and CEUs are available. Participants will engage in hands-on activities and receive free educational resources.

[julie.cahill@noaa.gov](mailto:julie.cahill@noaa.gov) or [wendy.perry@noaa.gov](mailto:wendy.perry@noaa.gov).

### **Generation Earth Back To School Forum – Los Angeles County**

This workshop, for Los Angeles County middle and high school teachers, August 28, 2004, offers environmental education resources and assists teachers in planning action projects for the coming year. Teachers will create a plan to increase the quality of environmental education in their classrooms. Generation Earth provides resources and referrals that support teachers' plans for the coming school year.

<http://www.generationearth.com/action/index.htm> .

### **GIS Ocean Explorers Project in California**

The Ocean Explorers project is a 3-year NSF funded project for middle and high school teachers to lead teams of teachers in the creation of lesson plans utilizing GIS technology in the study of the Channel Islands National Marine Sanctuary. There will be 2-3 day GIS introductory workshops in LA, as well as travel to the Channel Islands for a week-long research expedition this summer.

<http://www.exploreoceans.org> .

### **Great Lakes Institute Teacher Workshop**

Lake Michigan Federation, Indiana Dunes Environmental Learning Center, and Indiana Dunes National Lakeshore present the Great Lakes Institute Teacher Workshop, July 18-23, 2004. Teachers will spend 4 nights on board an EPA research vessel and one at the Learning Center. Materials and activities will include excerpts from the *Great Lakes In My World* curriculum. Citizen science projects will be the theme of this workshop, with activities from GLOBE, Adopt-a-Beach and the Midwest Clamwatchers projects.

<http://www.nps.gov/indu/learning/duneseducatorinstitutes.htm> .



### **Hands-on Learning in the Ballona Wetlands - California**

The Center for Ocean Sciences Education Excellence-West (COSEE-West) invites you to wade into the water, November 19, San Pedro, California, for environmental and marine science research and education. K-12 teachers may receive documentation for professional development hours upon request. Additional content information and classroom materials will be provided.

Contact Peggy Hamner at [phamner@ucla.edu](mailto:phamner@ucla.edu).

### **Hawaiian Fishponds Workshop**

This free teacher workshop, July 10, 2004, Maui, Hawaii, focuses on science, social studies, Hawaiian culture and language, through the study of native Hawaiian fishponds. The program, presented by NOAA's National Marine Sanctuary Program, is funded by the U.S. Department of Education to develop culturally relevant curricula utilizing the Hawaiian fishpond as a resource. Project Kāhea Loko, "Call of the Pond," has developed these curricula in partnership with the Hawai'i Department of Education and others. Kaimana Lee, (808) 879-2818.

### **Interdisciplinary Watershed Investigations Professional Development**

Michigan Technological University Educators' Professional Development Institute Series for Teachers (grades 3-12) hosts an *Interdisciplinary Watershed Investigations Workshop*, June 20-26, 2004, Houghton, Michigan. Teachers will learn methods used in watershed assessment.

[http://wupcenter.mtu.edu/teachers\\_professional.html](http://wupcenter.mtu.edu/teachers_professional.html) .

### **International Leadership Institute For Biodiversity Education**

World Wildlife Fund and Disney's Animal Kingdom are looking for 40 leaders to participate in the *International Leadership Institute for Biodiversity Education* to be held October 11-16, 2004, Orlando, Florida. The goal of this institute is to provide the tools to enable participants to lead, engage, and inspire others to protect biodiversity. The institute is open to leaders who have a broad reach, experience in implementing programs, and creating effective partnerships.

[www.worldwildlife.org/windows/institute.cfm](http://www.worldwildlife.org/windows/institute.cfm) .

### **Investigating and Evaluating Environmental Issues and Actions Workshop – Alaska and Hawaii**

The Investigating and Evaluating Environmental Issues and Actions Workshop will help teachers learn how to help students develop critical thinking skills, investigate environmental issues, and plan responsible citizenship action. Workshops will be held in Seward, Alaska, June 19-25, and Molokai, Hawaii, June 25–July 2, 2005.

<http://www.cisde.com/index.htm>

[cisde@midwest.net](mailto:cisde@midwest.net)

[teachu@wabash.net](mailto:teachu@wabash.net)

### **Islands, Vents, and Oceans...Essential Ecosystems For Many Species Nonformal Workshop - Mississippi**

The Center for Ocean Sciences Education Excellence: Central Gulf of Mexico (COSEE-CGM), the Office of Naval Research - National Oceanographic Partnership Program (NOPP), and other partners will sponsor a Nonformal Educators' Workshop December 2-3, 2004, Biloxi, Mississippi. Workshop topics will include marsh restoration; methane seeps and hydrothermal vents and the role that sulfide-producing bacteria play on vent

ecosystems; and oceans past, present, and future.  
Contact Shelia A. Brown at [shelia.brown@usm.edu](mailto:shelia.brown@usm.edu) .

### **JASON Academy**

The JASON Academy offers award-winning online courses. Sessions begin February 7, 2005, and include aquatic ecology, ocean science, rainforests-endangered ecosystems, and more. Several interactive science workshops will also be offered.

[http://www.jason.org/jason\\_academy/jason\\_academy.htm](http://www.jason.org/jason_academy/jason_academy.htm)

### **Jekyll Island Turtle Crawl - Georgia**

The Jekyll Island Sea Turtle Project is hosting the second annual Turtle Crawl, October 9, 2004, to benefit the new Georgia Sea Turtle Center at Jekyll Island. All proceeds from the event will go to support the development and educational efforts of the Center. With a planned opening in 2006, the Georgia Sea Turtle Center will be the first of its kind in the state. The Turtle Crawl will feature athletic competitions, entertainment, and educational activities.

[www.jekyllisland.com](http://www.jekyllisland.com) .

### **Key to the Sea Workshop - California**

Key to the Sea is a marine environmental education program designed for teachers and elementary school children throughout Los Angeles County. Learn about watershed stewardship, storm water pollution prevention, and marine conservation through engaging hands-on educational activities. Participants receive a free curriculum guide aligned to California state standards, all the supplies needed to conduct the activities in the classroom, and you can take your students to the partnering aquarium.

<http://www.healthebay.org/> .

### **Learning Ocean Science through Ocean Exploration Workshop**

Presented by Paula Keener-Chavis and Dr. Valerie Chase, this 6-hour pre-NMEA conference workshop, Sunday, July 18, 2004, provides hands-on activities from the Ocean Exploration curriculum, mixed with website connections, so that you can see the interaction between technology and classroom instruction in ocean science. Participants will receive a copy of *Learning Ocean Science through Ocean Exploration*, CDs of the Ocean Exploration website and other NOAA materials. Another was sponsored by the Alaska Sealife Center, Seward Alaska, August 14, 2004.

Valerie Chase at [vchase529@worldnet.att.net](mailto:vchase529@worldnet.att.net)

Lea Paddock at [Lea\\_Paddock@alaskasealife.org](mailto:Lea_Paddock@alaskasealife.org)

### **Learning Ocean Science through Ocean Exploration Curriculum Professional Development – Massachusetts and South Carolina**

The New England Aquarium will host a professional development institute for grade 6-12 teachers. The South Carolina Aquarium, Charleston, South Carolina, will host an Introduction to Learning Ocean Science through Ocean Exploration, and a follow-up session for those educators who have already attended the introduction to the Curriculum Session.

<http://oceanexplorer.noaa.gov> .

[jrubin@neaq.org](mailto:jrubin@neaq.org)

[kbryan@scaquarium.org](mailto:kbryan@scaquarium.org).

### **LiMPETS Workshop - California**

The Long-term Monitoring Program & Experiential Training for Students network provides a unique opportunity for teachers to gain the necessary skills and confidence to engage students in monitoring activities in the field. The workshop includes an introduction to monitoring techniques; field trips to a sandy beach site and a rocky intertidal site to collect data; instruction for entering data into online databases; and guidance for setting up your own marine monitoring program with your students.

<http://limpets.noaa.gov/projectInformation/introduction/welcome.html>

### **LiMPETS Workshop - California**

This workshop will cover two aspects of the program: rocky intertidal and sand crab monitoring. Teachers will be trained in the LiMPETS protocols including online data entry, and receive materials for use in the classroom.

<http://limpets.noaa.gov>

Contact Lisa Emanuelson at [Lisa.Emanuelson@noaa.gov](mailto:Lisa.Emanuelson@noaa.gov).

### **Linking the Ocean to the Classroom**

This educators workshop about the Gulf of Maine, June 28-July 1, Durham, New Hampshire, explores the latest technology and methods used to study the basis of the entire marine food web, phytoplankton. Educators and scientists will discuss, plan, and generate new ways of incorporating real-time and archived ocean observation data using an inquiry based model while still meeting the state or national standards.

<http://www.cooa.unh.edu/workshop.html>

### **Louisiana Department of Wildlife & Fisheries' Teacher Workshops**

Workshops are held throughout the state and offer Louisiana teaching resources to all participants. Topics range from wetland issues (one-week workshop held on a barrier island) to a migratory waterfowl workshop (3-day workshop with an air boat ride through optimal duck habitat in central LA).

<http://www.wlf.state.la.us/apps/netgear/index.asp?cn=lawlf&pid=315>.

### **Louisiana Universities Marine Consortium Scientist / Teacher Institute**

LUMCON and the Central Gulf of Mexico - COSEE Scientist/Teacher Institute course for middle school teachers includes a five-day residence component, June 20-25, plus 6 online sessions, July 8- August 13, 2004. Learn about oceanography and spend a week developing a continuing relationship with a research scientist. Additional institutes will be held in 2004 in: Alabama, June 27-July 2, Florida, June 20-25, Louisiana, June 20-25, Mississippi, June 21-25, and Texas, June 13-18.

[www.lumcon.edu/education/cosee](http://www.lumcon.edu/education/cosee).

### **Mangrove Forest Ecology, Management and Restoration Training Course**

The second "Mangrove Forest Ecology, Management and Restoration Training Course," Hollywood, Florida, USA, February 23-26, 2004 was taught in conjunction with the Mangrove Action Project. The tidal hydrology of mangrove forests was a major topic during the course. The third workshop, February 21-24, 2005, will emphasize cost-effective successful mangrove management and restoration.

<http://www.mangroverestoration.com/>

### **Mapping Ocean Sanctuaries GIS Workshop in Georgia**

A *Mapping Ocean Sanctuaries* GIS workshop, July 7-9th, 2004, Savannah, GA, included three days of hands-on instruction in Global Positioning Systems (GPS), Geographic

Information Systems (GIS) technologies, and field data collection techniques. Participants receive complimentary copies of NOAA's *Exploring Data with GIS to Experience Sanctuaries* (EDGES) curriculum and ESRI's *Mapping Our World GIS Lessons for Educators* curriculum (with a 1-year educational ArcView GIS site license). Jenny Brady at [jennyb@evisual.org](mailto:jennyb@evisual.org) or (800) 322-9884 x 253.

### **Mapping Ocean Sanctuaries Teacher Workshop - California**

Learn how to use Geographic Information Systems to study geography and ocean science and involve your students in field data collection and analysis using their own data along with data from scientific and governmental institutions. The workshop will involve 3 days of hands-on training in GIS and GPS technologies. Participants will receive the EDGES curriculum and a copy of *Mapping Our World* book which includes a one-year site license for ArcView 3.X GIS software.

[http://www.channelislands.noaa.gov/edu/edu\\_teacher.html](http://www.channelislands.noaa.gov/edu/edu_teacher.html) .

### **MARE Summer Leadership Institute**

The MARE Program from University of California/Berkeley's Lawrence Hall of Science Offers a one-week residential summer institute, August 1-8, 2004, UC Santa Cruz campus. Participants will gain skills to help them lead a school or district in the implementation of Ocean Week or Month using MARE's whole-school ocean immersion model and K-8 science curriculum. Daily instruction will include ocean science content delivered by educators, scientists and researchers.

<http://www.lhs.berkeley.edu/MARE> .

### **Marine Wildlife Viewing Workshop**

The 2003 *Marine Wildlife Viewing Workshop*, November 9-10, 2003, South Padre Island, Texas, provides a forum for the development of generally applicable guidelines for major types of commercial and recreational marine wildlife viewing activities. This year's program emphasizes the Gulf Coast and Greater Caribbean regions.

[http://www.watchablewildlife.org/conference/marine\\_workshop.htm](http://www.watchablewildlife.org/conference/marine_workshop.htm)

### **Massachusetts Institute of Technology's OpenCourseWare**

MIT's OpenCourseWare (OCW) launched its large-scale, web-based electronic publishing initiative, a free and open educational resource for faculty, students, and self-learners around the world, with the publication of approximately 500 courses. Courses include Ocean Engineering, Science Technology and Society, and Urban Studies and Planning.

<http://ocw.mit.edu/OcwWeb/index.htm>

### **MAST (Multicultural Students At Sea Together)—Opportunity for College Students**

This on-the-water program ran from June 16-July 10, 2003 in the Chesapeake Bay. The program covered marine science, marine policy, the heritage of African Americans and Native Americans on the Chesapeake and under sail, and seamanship. They also recruited an ethnically diverse crew, including African Americans, Native Americans, Hispanic Americans, Pacific Islanders, and others.

<http://www.hamptonu.edu/science/masthomepage.htm>

### **Master Naturalist Program - Florida**

The Florida Master Naturalist Program is an adult environmental education program from the University of Florida. Three 40-hour teaching modules include freshwater

wetlands, coastal systems, and upland habitats. Students learn science-based curriculum and interpretation skills in the classroom and in the field.

<http://www.masternaturalist.org/> .

### **MATE Center Faculty Development Institutes**

The Marine Advanced Technology Education (MATE) Center announces two faculty development institutes for summer 2004:

- Building Remotely Operated Vehicles (ROVs), July 1 - July 9, 2004
- GIS and Marine Science: Using GIS to model marine habitats, July 11-17, 2004.

Educators interested in organizing future workshops or regional student ROV competitions to feed into the national competition can participate in an optional day.

<http://www.marinetech.org/education/institutes.php> .

### **National Teachers Enhancement Network**

The National Teachers Enhancement Network (NTEN), delivers teaching resources and professional development opportunities through the Internet directly to K-12 science teachers. University scientists, engineers, mathematicians, and science educators teach NTEN's graduate courses. Educators access electronic teacher resources, discuss issues with other educators, and participate in high-quality graduate tele-computing courses, including the *Global Warming, Climate Change and our Environment* course.

<http://scienceteacher.org/courses.htm>

### **New Jersey Teach at the Beach**

The New Jersey Marine Education Association announces *Teach At The Beach* in Camden, New Jersey, May 14, 2004. The workshops and activities are designed to provide educators of all grades and disciplines with ideas, resources, lesson plans and programs dedicated to utilizing marine and aquatic environments as a background to classroom teaching.

<http://hometown.aol.com/newjerseymea/register.html> .

### **Parks As Labs, Studies Of Wildland Fire Ecology & Globe Workshop in Santa Monica**

This combination workshop, Santa Monica Mountains National Recreation Area, California, August 9-12, 2004, for middle and high school teachers, presents participants with skills and knowledge about these three environmental education programs.

Participants will receive teacher manuals, GLOBE protocols and data sheets. Priority enrollment is given to middle and high school teachers of science and environmental studies.

<http://www.nps.gov/samo/educate/workshops/PAL-Fire-GLOBE.htm> .

### **POW! Planning of Wetlands – Cape Lookout, North Carolina**

This two-day course, September 10-12, 2004, at the Cape Lookout Environmental Education Center, North Carolina, guided educators in the construction, restoration, enhancement and monitoring of wetlands in or near schoolyards using natural and/or artificial sources of water. Participants planned a wetland using hands-on activities. Each participant received a copy of *POW! The Planning of Wetlands*.

<http://www.wetland.org/educa.htm> .

### **POW! The Planning of Wetlands Facilitator Training**

Through a grant from The Waterfowl Festival, Environmental Concern constructed a demonstration wetland at their facility in St. Michaels, Maryland, August 25-27, 2004.

Rather than building the wetland as an end unto itself, it was incorporated into a 3-day POW! Facilitator's Training for those interested in working with schools and communities to build schoolyard habitats as areas for outdoor education.

[www.wetland.org](http://www.wetland.org) .

### **Professional Development in Georgia**

The Georgia Youth Science and Technology Center provides professional development for Georgia's educators, including workshops and excursion classes that involve travel to unique areas of the globe. Upcoming training includes:

- Changes in Latitudes: A Study of the Ecosystems of the Florida Keys
- Sapelo Island Excursion: Introduction to the Coastal Ecology of Sapelo Island
- Cumberland Island

<http://www.spsu.edu/gystc/events.html> .

### **Professional Development Programming for K-12 Teachers Available On-Line**

Annenberg/CPB, a partnership between The Annenberg Foundation and the Corporation for Public Broadcasting, uses media and telecommunications to advance teaching in American schools. The partnership funds and distributes educational video programs with coordinated Web and print materials for the professional development of K-12 teachers, for both course content and teaching methods.

[www.learner.org](http://www.learner.org)

### **Project Design and Evaluation Workshop**

A Project Design and Evaluation Workshop, February 17-19, 2004, Fairhope, AL, will be hosted by Weeks Bay National Estuarine Research Reserve. The workshop is designed to provide coastal educators in the Southeastern U.S. with the knowledge, skills, and tools to design and implement projects that have measurable impacts on the audience they want to reach.

[tsanchez@sarpc.org](mailto:tsanchez@sarpc.org)

### **Project Design and Evaluation Workshop**

NOAA Coastal Services Center offers a three-day *Project Design and Evaluation Course* in the Charlotte Harbor National Estuary Program study area, December 8-10, 2003, Punta Gorda, Florida. The course provides coastal resource management extension and education professionals with the knowledge, skills and tools to design and implement projects that have measurable impacts on the audience they want to reach.

[www.CharlotteHarborNEP.org](http://www.CharlotteHarborNEP.org)

### **Project Design and Evaluation – New Jersey**

The Project Design and Evaluation course, November 17-19, 2004, Tuckerton, New Jersey, provides coastal resource management extension and education professionals with the knowledge, skills, and tools to design and implement projects that have measurable impacts on the audience they want to reach. This interactive curriculum can help you increase the effectiveness of your projects by applying valid instructional design theory to their design.

Contact Lisa Weiss at [weiss@imcs.rutgers.edu](mailto:weiss@imcs.rutgers.edu) .

### **Project WILD & Monarchs Across Georgia Workshop**

Cobb County Adopt-A-Stream, Marietta, Georgia, presents this dual workshop September 21-22, 2004. Project WILD emphasizes the intrinsic and ecological values of wildlife, as well as its importance as a basis for teaching how ecosystems function.



Monarchs Across Georgia teaches ways to make your schoolyard or backyard an attractive habitat for monarchs and many other butterflies. Curriculum and resources are provided for both programs.

<http://eeingeorgia.org/event.asp?eventID=19621> .

### **Puget Sound Marine Science Education Workshop**

Join a workshop to coordinate and advance the state of field-based marine science education in Puget Sound. The workshop, *Coordinating and Advancing Field-Based Marine Science Education in Puget Sound: Creating a vision for the future*, will be held March 14-15, 2004, Seattle, Washington.

<http://www.oceaninquiry.org/workshop/> .

### **REVEL Project 2004**

The Research and Education: Volcanoes, Exploration and Life (REVEL) Project invites highly-motivated 7-12 grade science teachers who want to bring cutting-edge earth and ocean research into their classrooms to apply to the program. Through the REVEL Project, teachers are immersed in the scientific process as they explore the seafloor of the Juan de Fuca Plate in the Northeast Pacific Ocean.

<http://www.ocean.washington.edu/outreach/revel/> .

### **Remotely Operated Vehicles (ROVs) Workshop – Massachusetts**

The Stellwagen Bank National Marine Sanctuary, Woods Hole Oceanographic Institute and other partners offer an ROV Teacher Workshop, October 15-16, 2004, in Falmouth, Massachusetts. Participants will be introduced to ROV technology, research, monitoring and exploration; discuss infusing technology into the high school curriculum; help develop lesson plans for use in high school classes and after school programs get connected with a technology mentor; and more.

<http://stellwagen.nos.noaa.gov/> .

### **Remotely Operated Vehicles (ROVs) Workshop – Texas**

The Flower Garden Banks National Marine Sanctuary is sponsoring a teacher workshop to bring science technology into the classroom. Workshop participants will learn how technology, especially underwater ROVs, is used to research and explore sanctuary ecosystems in support of resource management. They will leave the workshop having constructed and tested their own mini-ROV to take back to the classroom, along with lesson plans and ideas for incorporating their new knowledge into the classroom.

Contact Shelley DuPuy at [shelley.dupuy@noaa.gov](mailto:shelley.dupuy@noaa.gov) .

### **Salish Sea Educator Sails - Washington**

Salish Sea Expeditions is a Washington State-based non-profit organization that combines Inquiry-Based Learning with classroom scientific study and boat-based field research, enabling students to learn scientific principles and practice problem-solving skills while navigating the waters of Puget Sound. They offered a chance for teachers to learn first-hand about their programs during free, three-hour, informal sails.

<http://www.salish.org/Teacher%20Sails%20031802.htm> .

### **Scott Aquarium Teacher Workshops**

The University of Southern Mississippi and the Scott Aquarium offer teacher workshops:

- Storm Drains: Pollution Solution workshops, March 9, and April 20, 2004
- Marine Biotechnology: The Wave of the Future, February 11 - 13, 2004
- Aquatic Nuisance Species teacher workshop, February 15 -17, 2004

- Centers for Ocean Sciences Education Excellence: Central Gulf of Mexico (COSEE:CGOM) will sponsor
  - Educators' Workshop, March 4-5, 2004
  - The Wonders of Wetlands teacher workshop, April 21 - 23, 2004
- [shelia.brown@usm.edu](mailto:shelia.brown@usm.edu) or [kay.baggett@usm.edu](mailto:kay.baggett@usm.edu) .

### **Sea ExChange**

NMEA and the Australian based Marine Education Society of Australasia (MESA) team up to bring marine educators together for professional development experiences through Sea ExChange, a cooperative program to assist marine educators working at similar jobs and facilities to set up exchanges. The program offers three types of exchange: short-term Partner and Education Group ExChanges, and longer term Job Exchanges. [http://www.mesa.edu.au/careers/sea\\_ExChange.asp](http://www.mesa.edu.au/careers/sea_ExChange.asp)

### **Seafood Sense: Fisheries Technology for Food Educators - Delaware**

Seafood specialists will lead a two-day training on seafood preparation and safety. Hands-on cooking activities will provide participants with practical opportunities to learn about buying, handling and preserving seafood, seafood composition and nutrition, and commercial fishing practices. The workshop will include seafood cooking and sampling, curriculum ideas for use in the participant's own educational workshops, a tour of a local seafood market, and a seafood issues internet tour. <http://www.ocean.udel.edu/seagrant/outreach/seafood/seafoodsense.html>

### **Seattle Aquarium's Marine Protected Areas Conference**

This past August, the City of Seattle designated much of the Seattle shoreline as a no-take marine protected area. To raise general public awareness of MPA issues, the Seattle Aquarium is hosting a workshop on Puget Sound MPAs on Saturday, March 27, 2004.

Contact Leo Shaw at [Leo.Shaw@Seattle.Gov](mailto:Leo.Shaw@Seattle.Gov)

### **SECOSEE 2004 Ocean Leadership Institute**

The SouthEast Center for Ocean Sciences Education Excellence (SouthEast COSEE) will hold the second Ocean Education Leadership Institute for middle and high school science teachers from NC, SC, and GA, June 25-July 1, 2004, Savannah, Georgia. Teachers will be introduced to ocean science research in island dynamics, physical and biological parameters of the South Atlantic Bight region, and develop and implement leadership skills necessary to share what they learn with their colleagues. <http://www.scseagrant.org/se-cosee/education.htm>

### **Seminars on Science: Sharks and Rays – Ecology, Classification and Evolution**

The American Museum of Natural History offers this six-week summer workshop, June 28 - August 8, 2004. Key science concepts and processes covered in the course include diversity and adaptation, anatomy, fossil evidence, and data analysis. Participants will have access to Museum scientists and educators and receive teaching tools to take back to their classroom. <http://learn.amnh.org/courses/sharks.php> .

### **Society for Conservation GIS Domestic Scholarship Program**

The SCGIS Domestic Scholarship Program offers competitive scholarships to conservation GIS users to attend advanced GIS training courses focused on conservation applications. Scholarship funds will cover all or partial airfare, waivers for

SCGIS conference related fees, as well as pre- and post-conference training. The annual ESRI User Conference is August 9 - 13, 2004, in San Diego, California. The annual SCGIS conference will be held September 27-29, 2004, in West Virginia.  
<http://www.scgis.org/> .

### **SouthEast Portals to Ocean Research for Teachers (SEPORTs)**

The SouthEast COSEE supports Action Projects in North and South Carolina and Georgia, with state and regional efforts to promote coastal environment projects, professional development opportunities for educators, and research activities. November 2004 events included the Southeast Phytoplankton Monitoring Network, *From Watersheds to Oyster Beds* and the North Carolina Estuarium, and *Eastern North Carolinians' Impact on the Atlantic Ocean*. Additional workshops are scheduled for January through March.  
<http://www.scseagrant.org/se-cosee/> .

### **Space Science Institute Workshops**

The Space Science Institute is hosting two education workshops this spring:

- Designing Exemplary Professional Development Experiences for Educators, March 18-20, 2004,  
<http://halvas.space-science.org/registration/SpecialTopicSpring2004/1.asp>
- 4-Day Education Workshop for Scientists, Engineers, and E/PO Managers, April 25-28, 2004,  
<http://halvas.space-science.org/registration/k12spring2004/1.asp#ann>.

### **Stone Lab Summer Teacher Courses**

F.T. Stone Laboratory, Ohio State University's Island Campus in Lake Erie, offers college credit courses to undergraduate and graduate students, educators, and outstanding high school students every summer. From Lake Erie geology to aquatic biology courses, students receive a hands-on science experience in one-day, one-week, or term courses.  
<http://www.sg.ohio-state.edu/SLAB/PRINT.HTM#workshops> .

### **Student-Teacher Field Studies in the National Marine Sanctuaries**

Funding is provided through the National Marine Sanctuary Program in partnership with the National Geographic Society Education Foundation for two student-teacher field studies in the national marine sanctuaries, Gray's Reef Marine Sanctuary in Georgia, grade 9-12, July 23-28, 2004 and the Channel Islands Marine Sanctuary in California, grade 5-8, and August 9-12, 2004.  
[www.ngsednet.org/profdev](http://www.ngsednet.org/profdev) .

### **Survey of Oceanography Graduate Course Offered Via Web**

Texas A&M University, College Station, offers the *Survey of Oceanography* course. All lectures, homework, and quizzes will be offered remotely. The course emphasizes problem-based learning and the use of web resources in the classroom. Modules include the role of the oceans in climate, the role of the ocean in weather, fisheries and the ocean as food source, coastal erosion, and coastal pollution.  
[stewart@ocean.tamu.edu](mailto:stewart@ocean.tamu.edu)

### **Take the Pulse of Our Changing Planet Workshop**

The Mid-Atlantic Center for Ocean Science Education Excellence (MACOSEE) offers a professional development workshop for middle school science teachers in Cambridge,

Maryland, July 11-17, 2004. Scientists take Earth's pulse through a network of high-tech stations called ocean observing systems. This workshop showcases these new observatories and how observatory data can enhance your science lessons.  
[www.macosee.net](http://www.macosee.net) .

#### **Teacher Seminar Research at SEA**

The Sea Education Association in Woods Hole, Massachusetts, offers teachers (grades 5-9) its Teacher Seminar Research at SEA. The seminar, funded by the National Science Foundation, provides oceanographic research experience and affords the opportunity to explore the oceanic environment while learning about the scientific research process first-hand. Applications are reviewed monthly.  
<http://www.sea.edu/sea2000/admission2000/teachers.htm> .

#### **Technology Integration On-Line Courses**

The George Lucas Educational Foundation provides a series of teaching modules developed by professional development experts and education faculty. For an understanding of effective technology integration, explore the modules focused on using technology in mathematics, science, language arts, and social studies curricula. An example integrates a digital microscope into pre-K through 5th grade science instruction.  
[www.qlf.org/foundation/courseware.php](http://www.qlf.org/foundation/courseware.php) .

#### **Texas A&M University's Marine Advisory Service Educator Workshops**

Texas Marine Advisory Service will host two development workshops for Texas educators on the environment and natural resources in Texas and the Gulf Coast. Teachers, science curriculum specialists, and department heads working in public and private schools are encouraged to register. Training sessions for elementary school educators were June 28-30; training for secondary school educators July 7-9. Contact [lbeach@neo.tamu.edu](mailto:lbeach@neo.tamu.edu) .

#### **Understanding Aquatic Nuisance Species and Their Terrestrial Counterparts**

The Dauphin Island Sea Lab and the J.L. Scott Marine Education Center and Aquarium announce a new on-line course for March, 2004, *Understanding Aquatic Nuisance Species and Their Terrestrial Counterparts*.  
[www.coexploration.org/ans](http://www.coexploration.org/ans) .

#### **University of New Hampshire Marine Science Graduate Fellowships**

Ten fellowships, coordinated by the UNH Marine Program, are offered for a summer 2004 start. They are with: the Center for Coastal and Ocean Mapping, Northeast Consortium, Cooperative Institute for Coastal and Environmental Technology (CICEET), Cooperative Institute for New England Mariculture and Fisheries, Center for Excellence in Coastal Ocean Observation and Analysis, and UNH/NOAA Joint Hydrographic Center.  
<http://www.marine.unh.edu/aboutmpfellowship.html> .

#### **Using Marine Biology to Teach Physiology and Ecology Workshops**

The Institute for Biomedical Philosophy offers teacher workshops utilizing marine biology as a hook to teach physiology and ecology. These programs are open to teachers, preservice teachers, administrators, informal educators, and science educator faculty. They are based on the national science education and teaching standards with content that can be integrated across the curriculum. The workshops are scheduled right before or after the NMEA meeting in St Petersburg.  
<http://www.biophi.org/pages/1/index.htm> .

### **Virtual International Educators' Web Site – Conference Listing**

This website, with listings about national and international conferences, is maintained by the Harvard Graduate School of Education. Please note that it does not currently have any environmental education conferences listed.

<http://www.gse.harvard.edu/%7Eviews/conferences.html> .

### **Water, Weather, and Electricity Workshops – Los Angeles**

The Los Angeles Department of Water and Power, in cooperation with the Los Angeles Unified School District, is offering a series of 13 workshops this fall emphasizing basic electricity and water science. Workshops will also include weather and air quality and advanced transportation for secondary teachers. All workshops are hands-on and materials are free to participants. The workshops are developed to help address the physical science components of testing. Standards are addressed at each workshop.

<http://www.ladwp.com/ladwp/cms/ladwp004782.jsp?> .

### **Watershed Academy Distance Learning Program**

The EPA provides an on-line Watershed Academy Distance Learning Program. The website offers a variety of training modules that present a basic and broad introduction to the watershed management field. The six module themes are introduction/overview, watershed ecology, watershed change, analysis and planning, management practices, and community/social/water law. The program is also available on CD.

<http://www.epa.gov/watertrain/> .

### **Wetland Education through Maps and Aerial Photography (WETMAAP) Workshop**

A free WETMAAP Workshop for teachers will be held during the week of June 21-25, 2004. The workshop will be given twice, with each session lasting 2 ½ days. Discover the functions and values of wetland habitats, learn the basics of wetland mapping, aerial photography, airborne and shuttle imagery, topographic maps, and GIS technology. Educators will learn how they can integrate wetland issues, maps, and images into their existing curriculum. Materials and resources will be provided.

<http://www.tbep.org/media/wetmaap.html> .

### **Whale Camp**

The Whale Camp offers one, two, and three week programs for students age 10-17 and teachers or adults interested in marine biology. The courses take place on the New Brunswick, Canada, island of Grand Manan, located in the the Bay of Fundy.

Participants have the opportunity for whale encounters, Atlantic Puffin nesting colony visits, and more. There are sessions for adults and for students in July and August, 2004.

[www.whalecamp.com](http://www.whalecamp.com) .

### **What Are Our Birds Telling Us? – Alaska Workshop**

The Alaska Natural Resource and Outdoor Education Association will host an educators' workshop and lecture, October 20, 2004, Anchorage, Alaska to explore what can we learn from birds about environmental change. The evening event will include hands-on educator activities related to birds and the environment, dinner, a panel discussion of changes that are being observed in the scientific and native communities in regards to bird populations, and more.

[www.anroe.org](http://www.anroe.org) .

**Wonders of Water - National Park Service Environmental Education Training Course**

This multi-certification course, July 26-30, 2004, Chattahoochee River Environmental Education Center, Alpharetta, Georgia, provides participants with certificates for Project WET, Wonders of Wetlands, EPD Adopt-A Stream, and National Park Service environmental education training. Participants receive the Project WET Curriculum and Activity Guide with 89 activities, Wow! the Wonders of Wetlands: An Educator's Guide with over 40 activities, and other lesson plans and resources.

[http://www.nps.gov/chat/educational\\_techniques.htm](http://www.nps.gov/chat/educational_techniques.htm) .

**Workshop on the Beach in the Florida Keys**

During this workshop, hosted by the Institute for Biomedical Philosophy, July 10-16, 2004, Marathon Key, Florida, educators will explore national standards-based biology and ecology concepts using hands-on marine biology models. The program is open to middle and high school teachers, pre-service teachers, informal educators, and science education faculty.

<http://www.biophi.org/pages/1/index.htm>